

### PLANNING COMMISSION SUPPLEMENTAL AGENDA

April 20, 2017 7:00 p.m.

### 7) Discussion Items

b) OA16-01 – Zoning Ordinance Text Amendment to Repeal and Replace the Stream and Creek Buffer

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### PLANNING COMMISSION REGULAR MEETING AGENDA

April 20, 2017 7:00 p.m.

- 1) Call to Order Chairman Theresa Stein
- 2) Pledge of Allegiance
- 3) Agenda Amendments (Planning Commission and Staff)
- 4) Commissioner Disclosures
- 5) Public Hearings
  - a) OA16-05 Zoning Ordinance Text Amendment to Reduce Maximum Building Heights in the C-4 District
- 6) Presentations
  - a) None Scheduled
- 7) Discussion Items
  - a) OA16-05 Zoning Ordinance Text Amendment to Reduce Maximum Building Heights in the C-4 District
  - b) OA16-01 Zoning Ordinance Text Amendment to Repeal and Replace the Stream and Creek Buffer
- 8) Action Items
  - a) None Scheduled <u>Note</u>: Any Discussion Item may be added as an Action Item during the meeting by motion of the Planning Commission.
- 9) Information Items
  - a) Status of Priority Work Items
- **10) Citizen Comments** All citizens who wish to speak about an item or issue that is not listed for a public hearing will be given an opportunity to speak (3 minute limit per speaker).
- 11) Council Representative's Report
- 12) Chairman's Comments
- 13) Planning Commissioners' Comments
- 14) Approval of Minutes
  - a) April 6, 2017 Regular Meeting
- 15) Adjournment

If you require any type of reasonable accommodation as a result of physical, sensory or mental disability in order to participate in this meeting <u>OR</u> if you would like an expanded copy of this agenda, please contact the Department of Community Development at (540) 338-2304 at least three days in advance of the meeting. <u>Expanded copies of the agenda may not be available the night of the meeting</u>, please request a copy in advance.

<u>USE OF ELECTRONIC DEVICES DURING MEETINGS</u> For the comfort and consideration of others, all cellular phones must be turned off and cannot be used in the Council Chambers. Pagers must be set on silent or vibrate mode. This is requested because of potential interference with our recording devices and the transmittal of our hearing impaired broadcast.



### STAFF REPORT ACTION ITEM

Item # 7.b.

**SUBJECT:** Repeal and Replacement of the Stream and Creek Buffer

Ordinance

**DATE OF MEETING:** April 20, 2017

**STAFF CONTACTS:** Sally Hankins, Town Attorney

Dan Galindo, Senior Planner

### **SUMMARY and RECOMMENDATIONS:**

At its meeting on April 6, 2017, the Planning Commission directed staff to amend the proposed State Waters Protection Ordinance to accomplish the following:

- 1. Make the ordinance applicable to only certain named streams, in lieu of all streams and creeks within the Town.
- 2. Clarify the phrase "part of a natural drainage way," to the extent it remains in the ordinance.
- 3. Define "Plan View"
- 4. Allow for encroachments as allowed under the Chesapeake Bay Preservation Act, and as enumerated in the Staff Report to the Planning Commission dated April 6, 2017.
- 5. To add "utilities" as an allowed encroachment.
- 6. To require an arborist recommendation prior to allowing for tree removal or tree replacement in the required setbacks.

The above changes were implemented as follows:

- 1. The definition of "Stream" at Section 14-3 of the proposed State Waters Protection Ordinance was amended so that the Ordinance would apply only to those streams shown on the "Map of Protected Streams."
- 2. The phrase "part of a natural drainage way," which had been part of the definition of "Stream," has been removed from the proposed Ordinance.
- 3. The phrase "measured in plan-view" has been defined in Section 14-3, Definitions.

- 4. The encroachments included in the April 6, 2017 staff report have been added to the Ordinance as Section 14-5 "Exceptions," with the exception of "water-dependent uses" which was excluded since the Town's streams are not large enough for boating and other water-dependent uses.
- 5. "Public Utilities installed by the Town" was added to Section 14-5 (Subsection 5) as a permissible encroachment. This exception would not cover private utilities installed by a developer, which utilities are now addressed at Section 14-5, subsection 6.
- 6. Section 14-5, Subsection 7 now addresses all exceptions dealing with vegetation within the required setbacks, and requires that plans be prepared by an arborist or other qualified individual.

### **ISSUES:**

- 1. <u>Legal</u> See Privileged Memo provided to the Planning Commission under separate cover
- 2. <u>Parking and Density calculations</u>. Section 4 of the Stream and Creek Buffer Ordinance provides that (a) the buffer shall not limit the density otherwise allowed on land within the buffer area and (b) that off-street parking requirements will be reduced as needed to accommodate the buffer. Planning Commission should direct Staff whether these provisions should continue to be included in the revised ordinance.
- 3. <u>Method of Measuring the 100-foot setback</u>. A stream expert recommended that the stream setback be measured from the edge of the stream channel, rather than from the centerline. I have amended the ordinance accordingly.

### **BUDGET IMPACT:**

Please see the Privileged Memo to the Planning Commission from the Town Attorney.

### MOTION(S):

"I move that the Planning Commission direct staff to advertise the draft State Waters Protection Ordinance for a Planning Commission public hearing to be held on May 18, 2017."

### **ATTACHMENT(S)**:

- 1. Draft State Waters Protection Ordinance (clean copy)
- 2. Draft State Waters Protection Ordinance (redline showing changes)
- 3. Map of Protected Streams
- 4. Privileged Memorandum to the Planning Commission from the Town Attorney (under separate cover)

| 1                |           | TOWN OF PURCELLVILLE                  |                     |                    |                     |             |
|------------------|-----------|---------------------------------------|---------------------|--------------------|---------------------|-------------|
| 2                |           |                                       | IN                  |                    |                     |             |
| 3                |           |                                       |                     |                    |                     |             |
| 4                |           | LOU                                   | DOUN COUNTY         | , VIRGINIA         |                     |             |
| 5<br>6           |           |                                       |                     |                    |                     |             |
| 7                |           |                                       |                     |                    |                     |             |
| 8                | ORDINANC  | NO.                                   | P                   | RESENTED:          |                     |             |
| 9                |           |                                       | A                   | DOPTED:            |                     |             |
| 10               |           |                                       |                     |                    |                     |             |
| 11<br>12         | AN OPDINA | ICE: REPEALIN                         | C ADTICLE 140       | "STDEAM ANI        | ) CDEEK RIJEE       | FD") OF     |
| 13               | AN ORDINA |                                       | N OF PURCELI        |                    |                     |             |
| 14               |           |                                       | G IT WITH           |                    |                     |             |
| 15               |           | PROTECTI                              | ON ORDINANC         | <b>E''</b> )       |                     |             |
| 16               |           |                                       |                     |                    |                     |             |
| 17               | WHEREAS,  | he Purcellville Plan                  | •                   |                    |                     | ngthen its  |
| 18               |           | protection of streams                 | and creeks locate   | d within the Tow   | n; and              |             |
| 19               | WHEREAS,  | oursuant to the Pla                   | anning Commission   | on's recommend     | lation, the Town    | Council     |
| 20               | ,         | dopted Resolution 1                   | •                   |                    |                     |             |
| 21               |           | 4, directing the Pla                  | _                   |                    | =                   |             |
| 22               |           | trengthening the To                   | wn's protection of  | streams and cree   | eks; and            |             |
| 23               | WHEDEAC   | ha Commonwaalth                       | of Virginia rooms   | nizas tha import   | ones of protectin   | a rinorion  |
| 23<br>24         | WHEREAS,  | he Commonwealth ands to the health of |                     | _                  | =                   |             |
| 25               |           | egulations that provi                 |                     |                    |                     |             |
| 26               |           | he natural environm                   | -                   | _                  | -                   |             |
| 27               |           | Act, which encoura                    |                     | <del>-</del>       | =                   |             |
| - <i>.</i><br>28 |           | Chesapeake Bay Pres                   | _                   |                    |                     | -           |
| 29               |           | promulgated under the                 | •                   |                    | mo water protection | J. 41104110 |
| 30               |           | S                                     | ,                   |                    |                     |             |
| 31               | WHEREAS,  | oursuant to authority                 | y under the Chesa   | apeake Bay Pres    | ervation Act, the   | Virginia    |
| 32               |           | State Water Contro                    | =                   | =                  |                     | _           |
| 33               |           | Purcellville to requir                | re a buffer of 100  | feet in width adj  | jacent to, and lan  | dward of,   |
| 34               |           | ertain riparian lands                 | s; and              |                    |                     |             |
| 35               |           |                                       |                     |                    |                     |             |
| 36               | WHEREAS,  | ınder the Chesapeak                   | ke Bay Preservatio  | n Act, this 100 f  | oot buffer is mea   | sured not   |
| 37               |           | rom the watercourse                   | e, but from the lan | nd adjacent to the | e watercourse to    | the extent  |
| 38               |           | such land serves ecol                 | ogical and biologic | cal processes that | t are important to  | the health  |
| 39               |           | of the watercourse; a                 | ınd                 |                    |                     |             |
| 40               |           |                                       |                     |                    |                     |             |
| 41               | WHEREAS,  | he Town desires to i                  | mplement a buffer   | that is measured   | I from the waterco  | ourse; and  |

| 42<br>43<br>44<br>45<br>46<br>47<br>48 |  | the literature on watercourse ecology generally concludes that the land abutting watercourses serves important functions to the health of the watercourse, including the removal of non-point source pollution, the assimilation and filtration of sediments and nutrients, the stabilization of soil, and the regulation of watercourse temperatures that can in turn affect the health of aquatic life; and |  |
|--|--|---|--|
| 49<br>50<br>51<br>52                   | WHEREAS,   | the literature on watercourse ecology generally concludes that a riparian buffer of at least 100 feet from the watercourse is necessary to achieve all of the protective functions that such lands perform; and   |  |
| 53<br>54<br>55<br>56                   | WHEREAS,   | pursuant to Va. Code 15.2-2283, the Town of Purcellville is authorized to adopt zoning ordinances that provide for the preservation of lands significant to the protection of the natural environment; and  |  |
| 57<br>58<br>59<br>60<br>61             | WHEREAS,   | the Town of Purcellville finds that all lands within 100 feet of a watercourse have an intrinsic water quality value due to the ecological and biological functions they perform, and the protection of such lands is necessary to protect the quality of the state's waters; and   |  |
| 62<br>63<br>64<br>65                   | WHEREAS,   | the Town finds that the public necessity, convenience, general welfare, and good zoning practice require the protection of lands adjacent to perennial and intermittent streams, because such lands perform important ecological and biological functions.  |  |
| 66                                     | NOW, THEREFORE, the Council of the Town of Purcellville, Virginia hereby ordains:  |   |  |
| 67                                     | Section 1. Repeal and Replace  |   |  |
| 68<br>69                               | That Town of Purcellville Zoning Ordinance, Article 14 "Stream and Creek Buffer" is hereby deleted in its entirety and replaced with Article 14 "State Waters Protection" as follows:  |   |  |
| 70                                     | Sec. 14-1. Authority   |   |  |
| 71<br>72<br>73<br>74                   | This article is adopted pursuant to the authority vested in the Town by Va. Code 15.2-2283, authorizing zoning regulations designed to preserve lands significant to the protection of the natural environment, and pursuant to the authority vested in the Town by the Chesapeake Bay Preservation Act. |   |  |

Sec. 14-2. Purpose.

The Town considers lands adjacent to intermittent and perennial streams to have intrinsic water quality value due the ecological and biological processes they perform, and considers their protection to be necessary to the protection of state waters. These riparian areas serve as a transition between terrestrial and aquatic ecosystems, significantly influencing the exchange of energy and matter between the two systems. These riparian areas, when properly protected, serve the following functions: (i) significantly reduce the amount of sediment and non-point source pollution that can enter streams from adjacent uplands, (ii) stabilize soils thereby preventing erosion of soils into streams, (iii) provide shade that protects and regulates watercourse temperatures, thereby protecting the health of aquatic life, (iv) help to absorb periodic flood surges, and (v) provide a source of food and habitat to fish and other wildlife.

The Commonwealth of Virginia recognizes the importance of protecting riparian lands to the health of state waters. It has authorized localities to adopt zoning regulations that provide for the preservation of lands significant to the protection of the natural environment, and has also adopted the Chesapeake Bay Preservation Act, which encourages all localities to adopt the water protection criteria set forth in regulations promulgated under the Act.

### Section 14-3. Definitions

- 1. Stream. A channel in which water accumulates and flows. Such accumulation and flow may be perennial or intermittent in nature. As used in this article, a "stream" includes only those streams and creeks identified on the map entitled "Map of Protected Streams" and excludes all other waterbodies.
  - a. Intermittent stream. A stream that contains flowing water for extended periods during a year, but does not carry flows at all times.
  - b. Perennial stream. A stream that contains flowing water year-round, during a year of normal rainfall. Generally, a perennial stream is located below the water table for most of the year, and groundwater is the primary source for stream flow. Runoff from precipitation is a supplemental source of water for stream flow.

| 108 | 2. "Measured in Plan-View." As used in this article, "measured in plan-view" shall        |
|-----|---|
| 109 | mean that distance is measured as a straight line based on a two-dimensional              |
| 110 | depiction of the stream channel, as viewed from above.                                    |
|     | depretion of the stream chamber, as the wear from accite.                                 |
| 111 | Sec. 14-4. Setbacks Established.  |
| 112 | Stream Setback. No construction, grading, clearing, development, or other land            |
| 113 | disturbance shall occur within 100 feet of the edge of a stream. The 100-foot setback     |
| 114 | shall be measured in plan-view from the edge of the stream channel, as verified in the    |
| 115 | field.  |
| 116 | Section 14-5. Exceptions.   |
| 117 | The following uses and activities may encroach into the required 100-foot stream setback, |
| 118 | only after the Zoning Administrator has determined that such use or activity meets the    |
| 119 | ·   |
| 120 | exception standards set forth in this article:  |
| 120 | 1. Dedevelopment of nonconforming uses provided such redevelopment does not               |
| 121 | 1. Redevelopment of nonconforming uses, provided such redevelopment does not              |
| 123 | cause any portion of the nonconforming use to be located closer to the stream.            |
| 123 | 2. Roads and driveways that meet the following conditions:                                |
| 125 | a. There is no reasonable alternative to aligning the road or driveway in, or across the  |
| 126 | required setback; and   |
| 127 | b. Both the alignment and the design of the road or driveway minimize:                    |
| 128 | (i) encroachment into the required setback, and (ii) adverse effects on water             |
| 129 | quality.  |
| 130 |   |
| 131 | 3. Passive recreational facilities such as boardwalks, trails, pathways, and              |
| 132 | accompanying signage, in accordance with an erosion and sediment control plan             |
| 133 | approved by Loudoun County.   |
| 134 |   |
| 135 | 4. Archaeological and historic preservation activities, subject to evidence that          |
| 136 | archeological resources or historic preservation resources exist within the required      |
| 137 | setback area.   |
| 138 |   |
| 139 | 5. Minor Public Utilities, as defined in the Zoning Ordinance, installed by the Town.     |
| 140 | - ·   |
| 141 | 6. Development, to the minimum degree necessary to achieve a reasonable buildable         |
| 142 | area for a principal structure and necessary utilities, while avoiding to the greatest    |

extent possible those trees that are of the highest value to the stream corridor. Such development shall occur subject to an erosion and sediment control plan approved by Loudoun County. If any trees are proposed to be removed to accommodate the development, a tree inventory of the site shall be submitted. The tree inventory shall (i) be prepared by a certified Professional Wetland Scientist, certified Arborist, Urban Forester, or Landscape Architect, (ii) identify the relative importance of each tree to the health of the stream corridor, (iii) inform the area selected for development, and (iv) identify the date it was prepared and the name of the individual who prepared it.

- 7. Existing vegetation may be removed and maintained within the required setback, and new vegetation may be planted within the required setback, subject to the following conditions:
  - a. The removal or maintenance of vegetation is necessary to provide for reasonable sight lines or reasonable access paths, and is done in accordance with a tree removal or maintenance plan that reflects best practices and is prepared by a certified Arborist, Urban Forester, or Landscape Architect.

As concerns tree maintenance under this subsection: All final pruning cuts shall be made sufficiently close to the trunk or parent limb but without cutting into the branch collar or leaving a protruding stub, according to the American National Standards Institute (arboricultural operations standard Z133.1). All necessary pruning cuts must be made to prevent bark from being torn from the tree and to facilitate rapid healing. Flush cuts are unacceptable.

As concerns tree removal under this subsection: Any tree removed under this subsection shall be replaced with a tree that is, in the written opinion of a certified Professional Wetland Scientist: (i) a specimen of at least of equal benefit to the health of the stream corridor as the removed tree, once full maturity is reached, and (ii) planted at a location that is appropriate for the health of the stream as well as the other trees within the stream corridor.

b. The removal of vegetation is necessary or beneficial to the health of the stream corridor, as determined in writing by a certified Professional Wetland Scientist. Removal of such vegetation shall be performed in accordance with a vegetation removal plan prepared by a certified

| 180<br>181<br>182<br>183<br>184<br>185               | Professional Wetland Scientist or certified Arborist, which clearly identifies<br>the vegetation to be removed and minimizes the resulting land disturbance<br>within the required setbacks. Such plan shall be submitted to the Town, and<br>shall identify the date it was prepared and the name of the individual who<br>prepared it.   |  |
|--|--|--|
| 186<br>187<br>188<br>189<br>190<br>191<br>192<br>193 | c. All new plantings within the required stream setback shall be beneficial to the health of the stream corridor, as determined in writing by a certified Professional Wetland Scientist or certified Arborist. All new plantings shall be installed consistent with a planting plan that reflects best practices and minimizes land disturbance within the required setback. Such planting plan shall be prepared by a certified Professional Wetland Scientist, or a certified Arborist, and submitted to the Town. The plan shall identify the date it was prepared and the name of the individual who prepared it. |  |
| 194  | Section 14-6. Applicability  |  |
| 195<br>196   | This article shall apply to all streams, as defined herein, located within the Town of Purcellville.   |  |
| 197  | Section 14-7. Relation to other Town ordinances and regulations  |  |
| 198<br>199   | To the extent this article conflicts with other local regulations, the regulations offering the greatest protection to the natural environment shall control.  |  |
| 200  | Section 14-8. Plan submission  |  |
| 201<br>202<br>203                                    | All plans for development, clearing, grading, and construction shall show all existing water channels, water bodies, and wetlands, and not just those streams regulated under this article.  |  |
| 204  | Section 14-9. Existing Uses  |  |
| 205<br>206<br>207                                    | Land uses that are located within the required stream setback at the time this article is adopted shall be deemed non-conforming uses and shall be governed as such under the Zoning Ordinance.  |  |
| 208  |  |  |

| 209   | Section 2. Savings Clause  |   |  |
|---|--|---|--|
| 210<br>211<br>212<br>213<br>214<br>215<br>216 | That the Stream and Creek Buffer Ordinance, which is repealed by this ordinance, shall remain in full force and effect until the effective date of this ordinance. The repeal of the Stream and Creek Buffer Ordinance shall not affect the authority of the Town to prosecute, punish or penalize any violation of the Stream and Creek Buffer Ordinance that occurred before the repeal hereunder takes effect. Repeal of the Stream and Creek Buffer Ordinance does not revive any prior version of the Stream and Creek Buffer Ordinance that may have been in force before or at the time this repeal takes effect. |   |  |
| 217   | Section 3. Severability  |   |  |
| 218<br>219<br>220                             | That if any section or provision of this article is held to be void or unconstitutional, such holding shall in no way affect the validity of the remaining sections or provisions of this article, which shall remain in full force and effect.  |   |  |
| 221   | Section 4. Effective Date.   |   |  |
| 222   | That this Ordinance shall be effective upon adoption.  |   |  |
| 223   |  |   |  |
| 224   | PASSED THIS DAY OF   | , 2017.                                     |  |
| 225   |  |   |  |
| 226   |  |   |  |
| 227<br>228                                    |  | Kwasi A. Fraser, Mayor Town of Purcellville |  |
| 229   |  | Town of Turcenvine                          |  |
| 230   | ATTEST:  |   |  |
| 231   |  |   |  |
| 232   |  |   |  |
| 233   | Diana Hays, Town Clerk   |   |  |
| 234   |  |   |  |
| 235   |  |   |  |

### 236 Legal and General References:

- 1. The *Chesapeake Bay Preservation Act*, as adopted by the General Assembly of the Commonwealth of Virginia, Va. Code § 62.1-44.15:67, et seq.
- 2. The *Chesapeake Bay Preservation Area Designation and Management Regulations*, as adopted by the State Water Control Board, Va. Admin Code § 9 VAC 25-830, et seq.
- 3. Riparian Areas Functions and Strategies for Management, prepared by the National Resource Council's Committee on Riparian Zone Functioning and Strategies for Management, <a href="https://www.nap.edu/catalog/10327/riparian-areas-functions-and-strategies-for-management">https://www.nap.edu/catalog/10327/riparian-areas-functions-and-strategies-for-management</a>
- 4. Streamside Forest Buffer Width Needed to Protect Stream Water Quality, Habitat, and Organisms: A Literature Review, Journal of the American Water Resources Association, June 2014.
- 5. Watershed Management for Potable Water Supply: Assessing the New York City Strategy (2000), Chapter 10, Setbacks and Buffer Zones, National Research Council Commission on Geosciences, Environment and Resources; Committee to Review the New York City Watershed Management Strategy, <a href="https://www.nap.edu/catalog/9677/watershed-management-for-potable-water-supply-assessing-the-new-york">https://www.nap.edu/catalog/9677/watershed-management-for-potable-water-supply-assessing-the-new-york</a>
- 6. Compensatory Stream Mitigation, Army Corps of Engineers, Little Rock Division, 2008
- 7. Riparian Buffer Zones: Functions and Recommended Widths, Hawes and Smith, Yale School of Forestry and Environmental Studies, April 2005

### TOWN OF PURCELLVILLE

IN

### LOUDOUN COUNTY, VIRGINIA

ORDINANCE NO. PRESENTED:
ADOPTED:

AN ORDINANCE: REPEALING ARTICLE 14 ("STREAM AND CREEK BUFFER")
OF THE TOWN OF PURCELLVILLE ZONING ORDINANCE,
AND REPLACING IT WITH ARTICLE 14 ("STATE WATERS
PROTECTION ORDINANCE")

- **WHEREAS**, the Purcellville Planning Commission recommended that the Town strengthen its protection of streams and creeks located within the Town; and
- WHEREAS, <u>pursuant to the Planning Commission's recommendation</u>, the Town Council adopted Resolution 16-10-02, initiating an amendment of Zoning Ordinance Article 14, directing the Planning Commission to revise Article 14 for the purpose of strengthening the Town's protection of streams and creeks; and
- WHEREAS, the Commonwealth of Virginia recognizes the importance of protecting riparian lands to the health of state waters. It has authorized localities to adopt zoning regulations that provide for the preservation of lands significant to the protection of the natural environment, and has also adopted the Chesapeake Bay Preservation Act, which encourages all localities even those not mandated to adopt the Chesapeake Bay Preservation Act regulations to adopt the water protection criteria promulgated under the Act; and
- WHEREAS, pursuant to authority under the Chesapeake Bay Preservation Act, the Virginia State Water Control Board promulgated regulations that allow the Town of Purcellville to require a buffer of 100 feet in width adjacent to, and landward of, certain riparian lands; and
- **WHEREAS,** under the Chesapeake Bay Preservation Act, this 100 foot buffer is measured not from the watercourse, but from the land adjacent to the watercourse to the extent such land serves ecological and biological processes that are important to the health of the watercourse; and

- AN ORDINANCE: REPEALING ARTICLE 14 ("STREAM AND CREEK BUFFER")
  OF THE TOWN OF PURCELLVILLE ZONING ORDINANCE,
  AND REPLACING IT WITH ARTICLE 14 ("STATE WATERS
  PROTECTION ORDINANCE")
- WHEREAS, the scientific Town desires to implement a buffer that is measured from the watercourse; and
- WHEREAS, the literature on watercourse ecology generally concludes that the land abutting watercourses serves important functions to the health of the watercourse, including the removal of non-point source pollution, the assimilation and filtration of sediments and nutrients, the stabilization of soil, and the regulation of watercourse temperatures that can in turn affect the health of aquatic life; and
- **WHEREAS**, the scientific literature on watercourse ecology generally concludes that a riparian buffer of at least 100 feet from the watercourse is necessary to achieve all of the protective functions that such lands perform; and
- **WHEREAS**, pursuant to Va. Code 15.2-2283, the Town of Purcellville is authorized to adopt zoning ordinances that provide for the preservation of lands significant to the protection of the natural environment; and
- WHEREAS, the Town of Purcellville finds that all lands within 100 feet of a watercourse have an intrinsic water quality value due to the ecological and biological functions they perform, and the protection of such lands is necessary to protect the quality of the state's waters; and
- WHEREAS, the Town finds that the public necessity, convenience, general welfare, and good zoning practice require the protection of lands adjacent to water bodies and watercourses, whether such water bodies and watercourses have flows that are perennial, perennial and intermittent, or ephemeral streams, because such lands perform important ecological and biological functions.

**NOW, THEREFORE,** the Council of the Town of Purcellville, Virginia hereby ordains:

### Section 1. Repeal and Replace

That Town of Purcellville Zoning Ordinance, Article 14 "Stream and Creek Buffer" is hereby deleted in its entirety and replaced with Article 14 "State Waters Protection" as follows:

Sec. 14-1. Authority

This article is adopted pursuant to the authority vested in the Town by Va. Code 15.2-2283, authorizing zoning regulations designed to preserve lands significant to the protection of the natural environment, and pursuant to the authority vested in the Town by the Chesapeake Bay Preservation Act.

### Sec. 14-2. Purpose.

The Town considers lands adjacent to all waterbodies, including ephemeral, intermittent, and perennial streams and creeks, to have intrinsic water quality value due the ecological and biological processes they perform, and considers their protection to be necessary to the protection of state waters. These riparian areas serve as a transition between terrestrial and aquatic ecosystems, significantly influencing the exchange of energy and matter between the two systems. These riparian areas, when properly protected, serve the following functions: (i) significantly reduce the abilityamount of sediment and non-point source pollution, contained in waters flowing to waterbodies that can enter streams from adjacent uplands, from reaching ground water, streams and creeks, (ii) stabilize soils thereby preventing erosion of soils into streams and creeks, (iii) provide shade that protects and regulates watercourse temperatures, thereby protecting the health of aquatic life, (iv) help to absorb periodic flood surges, and (v) provide a source of food and habitat to fish and other wildlife.

The Commonwealth of Virginia recognizes the importance of protecting riparian lands to the health of state waters. It has authorized localities to adopt zoning regulations that provide for the preservation of lands significant to the protection of the natural environment, and has also adopted the Chesapeake Bay Preservation Act, which encourages all localities to adopt the water protection criteria set forth in regulations promulgated under the Act.

### Section 14-3. Definitions

Waterbody: All ponds, lakes, rivers, creeks, brooks, streams, springs, and reservoirs, whether perennial, intermittent or ephemeral in nature. The term "waterbody" excludes manmade waterbodies and ditches, unless they are part of a natural drainage way, and also excludes wetlands and groundwater. The term "waterbody" shall include all perennial, intermittent, and ephemeral waterbodies.

1. Stream. A channel in which water accumulates and flows. Such accumulation and flow may be perennial or intermittent in nature. As used in this article, a

"stream" includes only those streams and creeks identified on the map entitled "Map of Protected Streams" and excludes all other waterbodies.

- a. Intermittent stream. A stream that contains flowing water for extended periods during a year, but does not carry flows at all times.
- b. Perennial stream. A stream that contains flowing water year-round, during a year of normal rainfall. Generally, a perennial stream is located below the water table for most of the year, and groundwater is the primary source for stream flow. Runoff from precipitation is a supplemental source of water for stream flow.
- 2. "Measured in Plan-View." As used in this article, "measured in plan-view" shall mean that distance is measured as a straight line based on a two-dimensional depiction of the stream channel, as viewed from above.

### Sec. 14-4. Setbacks Established.

Stream Setback. No construction, grading, clearing, development, or other land disturbance shall occur within 100 feet of a waterbody. If the waterbody is a creek, brook, or the edge of a stream the. The 100-foot setback shall be measured in "planview" around the entire perimeter of the waterbody from the centerline of the waterbody. If the waterbody is a pond, lake, spring, or reservoir the 100-foot setback shall be measured in "plan view" around the entire perimeter of the waterbody from the outer edge of the waterbody. -view from the edge of the stream channel, as verified in the field.

### Section 14-5. Exceptions.

### To be determined by Planning Commission and Town Council.

The following uses and activities may encroach into the required 100-foot stream setback, only after the Zoning Administrator has determined that such use or activity meets the exception standards set forth in this article:

- 1. Redevelopment of nonconforming uses, provided such redevelopment does not cause any portion of the nonconforming use to be located closer to the stream.
- 2. Roads and driveways that meet the following conditions:

- a. There is no reasonable alternative to aligning the road or driveway in, or across the required setback; and
- <u>b.</u> Both the alignment and the design of the road or driveway minimize: (i) encroachment into the required setback, and (ii) adverse effects on water quality.
- 3. Passive recreational facilities such as boardwalks, trails, pathways, and accompanying signage, in accordance with an erosion and sediment control plan approved by Loudoun County.
- 4. Archaeological and historic preservation activities, subject to evidence that archeological resources or historic preservation resources exist within the required setback area.
- 5. Minor Public Utilities, as defined in the Zoning Ordinance, installed by the Town.
- 6. Development, to the minimum degree necessary to achieve a reasonable buildable area for a principal structure and necessary utilities, while avoiding to the greatest extent possible those trees that are of the highest value to the stream corridor. Such development shall occur subject to an erosion and sediment control plan approved by Loudoun County. If any trees are proposed to be removed to accommodate the development, a tree inventory of the site shall be submitted. The tree inventory shall (i) be prepared by a certified Professional Wetland Scientist, certified Arborist, Urban Forester, or Landscape Architect, (ii) identify the relative importance of each tree to the health of the stream corridor, (iii) inform the area selected for development, and (iv) identify the date it was prepared and the name of the individual who prepared it.
- 7. Existing vegetation may be removed and maintained within the required setback, and new vegetation may be planted within the required setback, subject to the following conditions:
  - a. The removal or maintenance of vegetation is necessary to provide for reasonable sight lines or reasonable access paths, and is done in accordance with a tree removal or maintenance plan that reflects best practices and is prepared by a certified Arborist, Urban Forester, or Landscape Architect.

As concerns tree maintenance under this subsection: All final pruning cuts shall be made sufficiently close to the trunk or parent limb but without cutting into the branch collar or leaving a protruding stub, according to the American National Standards Institute (arboricultural operations standard Z133.1). All necessary pruning cuts must be made to prevent bark from being torn from the tree and to facilitate rapid healing. Flush cuts are unacceptable.

As concerns tree removal under this subsection: Any tree removed under this subsection shall be replaced with a tree that is, in the written opinion of a certified Professional Wetland Scientist: (i) a specimen of at least of equal benefit to the health of the stream corridor as the removed tree, once full maturity is reached, and (ii) planted at a location that is appropriate for the health of the stream as well as the other trees within the stream corridor.

- b. The removal of vegetation is necessary or beneficial to the health of the stream corridor, as determined in writing by a certified Professional Wetland Scientist. Removal of such vegetation shall be performed in accordance with a vegetation removal plan prepared by a certified Professional Wetland Scientist or certified Arborist, which clearly identifies the vegetation to be removed and minimizes the resulting land disturbance within the required setbacks. Such plan shall be submitted to the Town, and shall identify the date it was prepared and the name of the individual who prepared it.
- c. All new plantings within the required stream setback shall be beneficial to the health of the stream corridor, as determined in writing by a certified Professional Wetland Scientist or certified Arborist. All new plantings shall be installed consistent with a planting plan that reflects best practices and minimizes land disturbance within the required setback. Such planting plan shall be prepared by a certified Professional Wetland Scientist, or a certified Arborist, and submitted to the Town. The plan shall identify the date it was prepared and the name of the individual who prepared it.

Section 14-6. Applicability

This article shall apply to all properties and waterbodiesstreams, as defined herein, located within the Town of Purcellville.

Section 14-7. Relation to other Town ordinances and regulations

To the extent this article conflicts with other local regulations, the regulations offering the greatest protection to the natural environment shall control.

Section 14-8. Plan submission

All plans for development, clearing, grading, and construction shall show existing waterbodies. all existing water channels, water bodies, and wetlands, and not just those streams regulated under this article.

Section 14-9. Existing Uses

This article shall not apply retroactively to uses and activities that are existing and ongoing. However, this article shall apply at the time an existing and ongoing use or activity is changed.

Land uses that are located within the required stream setback at the time this article is adopted shall be deemed non-conforming uses and shall be governed as such under the Zoning Ordinance.

### Section 2. Savings Clause

That the Stream and Creek Buffer Ordinance, which is repealed by this ordinance, shall remain in full force and effect until the effective date of this ordinance. The repeal of the Stream and Creek Buffer Ordinance shall not affect the authority of the Town to prosecute, punish or penalize any violation of the Stream and Creek Buffer Ordinance that occurred before the repeal hereunder takes effect. Repeal of the Stream and Creek Buffer Ordinance does not revive any prior version of the Stream and Creek Buffer Ordinance that may have been in force before or at the time this repeal takes effect.

### Section 3. Severability

That if any section or provision of this article is held to be void or unconstitutional, such holding shall in no way affect the validity of the remaining sections or provisions of this article, which shall remain in full force and effect.

2017

### Section 4. Effective Date.

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That this Ordinance shall be effective upon adoption.

DAVAE

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|                        |                        |  |
|                        | Kwasi A. Fraser, Mayor |  |
|                        | Town of Purcellville   |  |
|                        |                        |  |
| ATTEST:                |                        |  |
|                        |                        |  |
|                        |                        |  |
| Diana Hays, Town Clerk |                        |  |

### Legal and General References:

- 1. The *Chesapeake Bay Preservation Act*, as adopted by the General Assembly of the Commonwealth of Virginia, Va. Code § 62.1-44.15:67, et seq.
- 2. The Chesapeake Bay Preservation Area Designation and Management Regulations, as adopted by the State Water Control Board, Va. Admin Code § 9 VAC 25-830, et seq.
- 3. Riparian Areas Functions and Strategies for Management, prepared by the National Resource Council's Committee on Riparian Zone Functioning and Strategies for Management, <a href="https://www.nap.edu/catalog/10327/riparian-areas-functions-and-strategies-for-management">https://www.nap.edu/catalog/10327/riparian-areas-functions-and-strategies-for-management</a>
- 4. Streamside Forest Buffer Width Needed to Protect Stream Water Quality, Habitat, and Organisms: A Literature Review, Journal of the American Water Resources Association, June 2014.
- 5. Watershed Management for Potable Water Supply: Assessing the New York City Strategy (2000), Chapter 10, Setbacks and Buffer Zones, National Research Council Commission on Geosciences, Environment and Resources; Committee to Review the New York City Watershed Management Strategy, <a href="https://www.nap.edu/catalog/9677/watershed-management-for-potable-water-supply-assessing-th">https://www.nap.edu/catalog/9677/watershed-management-for-potable-water-supply-assessing-th</a>
  - https://www.nap.edu/catalog/96///watershed-management-for-potable-water-supply-assessing-the-new-york
- 6. Compensatory Stream Mitigation, Army Corps of Engineers, Little Rock Division, 2008
- 7. Riparian Buffer Zones: Functions and Recommended Widths, Hawes and Smith, Yale School of Forestry and Environmental Studies, April 2005

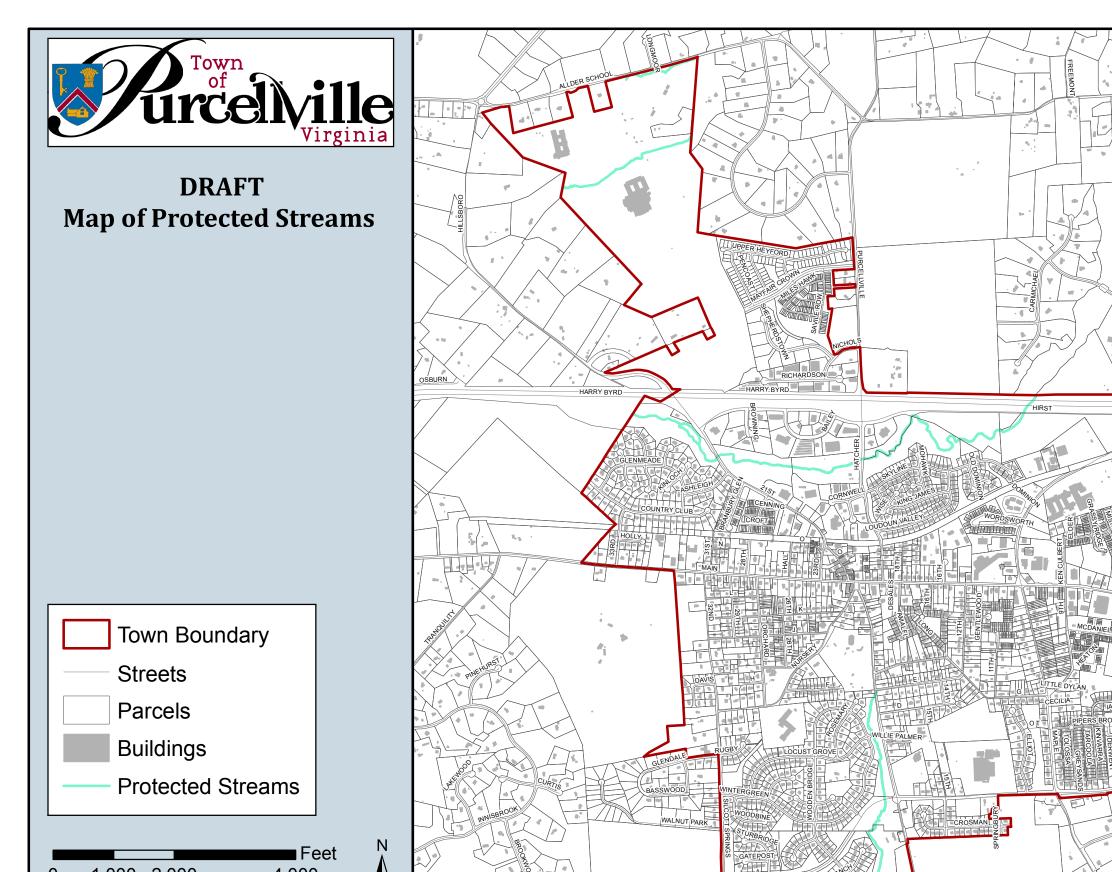
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| Description   | Purcellville State Waters Protection Ordinance v2  |
| Document 2 ID | file://Y:\Zoning Ordinance Text Amendments\2016<br>ZOAMs\Stream and Creek Buffer\Drafts of<br>Ordinance\4.20.17. PC Draft - Purcellville State Waters<br>Protection Ordinance.docx |
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